ABSTRACT

A carburetor for an internal combustion engine having a body that fastens at a first end to an air filter and at a second end to the intake port of a cylinder head. The body has an intake bore formed in the first end that receives air from the air filter, a throttle bore formed in the second end that provides a fuel/air mixture to the intake port, and a venturi formed between the intake bore and the throttle bore that receives air from the intake bore, provides fuel to form a fuel/air mixture, and provides the fuel/air mixture to the throttle bore. A bore is formed in the body from the venturi and receives a nozzle that communicates fuel to the venturi. A fuel enrichment system, which is responsive to the vibration of the engine, has a passage that communicates air from the intake bore, through the passage, to the nozzle. A valve seat is disposed within the passage and also has a passage to allow the flow of air therethrough. A ball is disposed within the passage of the fuel enrichment system that seats against the valve seat when the engine is below engine cranking speeds to prevent the passage of air through the valve seat. When the engine is above engine cranking speeds, the ball will resonate within the passage of the fuel enrichment system and unseat from the valve seat, thereby allowing the flow of air around the ball and through the valve seat.